

ABSTRACT OF THE DISCLOSURE

A switching power supply unit of the present invention
a timing generating circuit (121) which receives a first
5 control signal formed by a rectifier-transistor driving
circuit (104), forms a second control signal based on the first
control signal, and supplies the second control signal to a
control electrode of the rectifier transistor (113).

The first control signal is synchronized with the
0 switching operation of a half-bridge circuit (102), and the
second control signal exceeds a threshold voltage of a
rectifier transistor (113) at a timing substantially equal to
the timing that one edge of the first control signal is
generated and falls below the threshold voltage of the
5 rectifier transistor (113) at a timing earlier by predetermined
time than the timing that the other edge of the first control
signal is generated.